

**MASSACHUSETTS TRIAL COURT
SECURITY DEPARTMENT
*STANDARDS & TRAINING DIVISION***



**HEALTH & WELLNESS
PROGRAM MANUAL**

Massachusetts Trial Court
Office of Court Management
Security Department
3 Pemberton Square, 15th Floor
Boston, MA 02108
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DISCLAIMER

This manual is intended to provide current and accurate physical fitness information that can be utilized in preparation for a recruit physical fitness program. It is offered as an informational aid only and is not intended to render individual, professional, or medical advice. Any discomfort, injuries, or questions regarding the capability of a person to perform any of the tests, programs, or activities set forth in this guide should be referred to the individual's medical practitioner.

Consult your physician prior to starting a physical fitness training program.



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NOTE:

The following information is not intended and should not be construed as medical advice. This information should not be relied upon as a substitution for medical attention from qualified health professionals who are familiar with your individual needs. All training recommendations should be considered for general use only.

MTCSD

STANDARDS & TRAINING DIVISION

HEALTH AND WELLNESS PROGRAM

Mission Statement

Court Officers can be placed in situations that challenge their physical endurance, agility, or strength. In these instances, an officer's physical fitness may be the only thing that protects him, her, or others from injury, even life and death. Individuals who lack muscular strength and endurance necessary to successfully cope with these situations are not prepared to adequately perform their duties. Minimum levels of strength, flexibility, and endurance are necessary for an officer to successfully manage violent situations as well as to enhance the safety of fellow Officers and those that the Court Officer is charged with protecting. These standards are expectations of each Officer that are kept throughout their career to ensure success, safety, and security.

Physical Fitness and the Public Safety Profession

Physical fitness can be defined as an organic condition of the body which enables an individual to use his/her body in activities requiring strength, muscular endurance, cardio-respiratory fitness, flexibility, coordination, agility, power, balance, speed and accuracy - without undue experience of fatigue or exhaustion.

By their very nature, courthouse operations and the events connected to judicial proceedings may entail a heightened degree of risk. Every business day over 40,000 individuals enter the Commonwealth's courthouses and some, as a result of their personal situation, could be disgruntled, angry, or emotionally overwhelmed while others will enter in the custody of the state and will face criminal charges that vary in severity from relatively minor misdemeanors to heinous felonies. All will perceive their personal situation differently and the potential that some will act impulsively or with volatility in reaction to their situation always exists.

To manage the security risks present in our courthouses, the Trial Court employs physical security designs, procedures, and technical security systems along with over 1000 court officers. Court officers provide security at courthouse entrances and within the common areas, in courtrooms, and they maintain the care and custody of detainees held by the court. Court officers are required to manage a variety of security related situations. On occasion they must subdue and arrest non-compliant persons, prevent the escape of persons in custody, and they must have the stamina and strength to respond to medical or other emergencies under highly stressful conditions. Studies and practical experience has shown that good physical fitness benefits both the officer and the agency. Officer wellness relates positively to an officer's ability to perform the essential and emergency functions of the job, reduces the likelihood of an on the job injury, and lessens the known health risks associated with the public safety profession. Officer fitness and wellness also helps to minimize risk of excessive force, and it contributes to meeting many legal requirements to avoid litigation by providing a defensible position if challenged in court.

Court Officers and Court Officer Recruits in training must demonstrate and maintain a level of physical fitness that ensures an absolute ability to provide the level of public safety required by the Massachusetts Trial Court Security Department. In situations of pursuing an escaping felon, an altercation, or responding to a medical emergency and maintaining civil order, it is expected that court officers will be capable of performing in a manner consistent with the principals that they have been entrusted to provide by the Commonwealth and the Citizens of Massachusetts.

The Physical Abilities Test (PAT)

The Massachusetts Trial Security Department conducts a physical ability test during the hiring process to ensure that a Court Officer applicant can demonstrate the physical ability to perform basic physical tasks and requirements of the Court Officer position. The PAT is a job task simulation test and is not necessarily an indicator of physical fitness. To participate in the PAT all participants must present a Medical Clearance Waiver (see appendix A) as well as a Waiver & Release of Liability (see appendix B). All participants will be screened by an EMT on the day of the event before the PAT is administered to ensure that the participants' Heart Rate, Blood Pressure, and Body Temperature are within the acceptable range.

Incumbent Wellness Program

Incumbent Court Officers are afforded the opportunity to participate in an annual Physical Abilities Test (PAT). All participants must present a Physical Abilities Test Attestation (see appendix C) and Waiver & Release of Liability. All participants will be screened by an EMT on the day of the event before the PAT is administered to ensure that the participants' Heart Rate, Blood Pressure, and Body Temperature are within the acceptable range. Compensation for successful completion of the test is pursuant to the terms of the collective bargaining agreement.

Academy Physical Training Component

Introduction:

The Massachusetts Court Officer Academy provides training in three components essential for success as a court officer. They include the academic or knowledge aspects of the policies, procedures, and tactics required of the court officer position and which they must be familiar with to perform his or her job properly. The academy also includes training and in some cases certification in the various skills such as defensive tactics or emergency medical response techniques that court officers must master to perform related job functions. The academy also includes a physical fitness component that is intended to provide and assure that court officers have the underlying physical ability and stamina to perform both the routine and emergency functions of their job safely and successfully.

Physical fitness preparedness is paramount to your success in completing the training regimen at the Massachusetts Trial Court Security Department Academy. Experience has shown that a majority of people that fail to successfully complete the training program fail as a result of not being properly prepared to meet the physical demands of training. A typical training day consists of about one hour of physical exercise of varying intensity. A high number of individuals who fail to complete the training academy do so because they are incapable of participating at the same physical level as their successful classmates or they are unable to participate in a program that involves daily exercise without becoming injured. These injuries are most often of the overuse variety and can be attributed to a failure to enter the academy in sufficient physical condition. In order to increase your chances of successfully completing the training program, it is essential to be acclimated to regular physical activity before your arrival. It is advisable that Court Officer Recruits participate in a regular and consistent fitness routine and not rely on the academy to get you in shape. It is unlikely this approach will be successful.

To assure that a Court Officer Recruit can fully participate in the training regimen safely, and with reduced risk of injury, Recruits will complete a Physical Fitness Assessment at the start of the Academy Class. Details of this assessment are contained in the Physical Fitness Assessment section.

It is recommended that you develop and participate in a personal fitness program that meets your individual needs. It is important that you adhere to sound guidelines and safe procedures when

planning and participating in any fitness program. In preparation of attending the Academy, and to optimize your safety during an exercise training program, some initial screening for important medical and health factors is necessary. Your personal use of the Physical Activity Readiness Questionnaire (PAR-Q) (see appendix D) is recommended as a minimal standard for screening prior to beginning an exercise program, and consulting a physician is always advisable if the level of regularity and intensity will be increased. The PAR-Q is designed to identify the small number of adults for whom physical activity might be inappropriate and should have medical clearance prior to participating in an exercise program. If after reading the following information you are still not sure how to properly train for increased physical activity, seek out the advice of a physician or trained and certified fitness specialist.

Physical fitness training will be conducted during each training day or as determined by the Health & Wellness Coordinator. All physical fitness training will be led by certified Health and Wellness Instructors. Prior to the start of all physical training, safety and wellness checks will be conducted. Every physical exercise program will have academy staff instructors assigned specifically as safety observers for the Recruits. It is the expectation and a requirement of the Massachusetts Trial Court Security Department that all Recruits participate in the daily Health and Wellness program as it is a crucial element of being a Court Officer.

Recruits must fully participate in a minimum of 70% of daily physical training sessions to meet the physical fitness requirement for academy graduation. Modifications and non-participations is determined by the lead physical training instructor for that day and will be recorded on the Non-participant/Modified PT Record (see appendix E).

Non-participation is defined by the following conditions:

- a. The Recruit is assigned to alternate exercise due to illness or injury.
- b. The Recruit is absent from the academy for any reason.
- c. The Recruit cannot maintain the minimum pace for the entire distance of an endurance run.
- d. The Recruit displays less than full effort in exercise routines that require repetitions or skills that are not quantifiable, such as jumping rope.

Non-participation days cannot be made up. A determination of modified or non-participation status may be appealed by a Recruit by submitting a To/From memo to the Academy Director within 24-hours of the training session in question. The decision of the Academy Director is final.

The Massachusetts Trial Court Security Department is committed to providing a safe training environment, and that recruit safety and well-being is the principal focus for all academy staff.

Recruits should be prepared for the daily workouts to consist of, but not limited to, HIIT (High Intensity Interval Training), Weight lifting, and Running. Runs will average 30 minutes and vary in design to include;

1. Long Distance Formation Runs (up to a 3 mile run at an 11 min/mi pace)
2. Individual pace runs
3. Short distance sprints
4. Formation interval sprints (ladder sprints)

Initial Physical Fitness Assessment

The Massachusetts Trial Security Department will conduct physical fitness assessments at the initiation of each Academy Class to ensure that Recruits have a reasonable level of physical fitness in order to safely and fully participate in the Academy training program. There are four components that compose the Physical Fitness Assessment (PFA). They include a timed mile and half run, a timed 300 meter run, and a timed sit-up and push-up test. Standards for successful completion of this assessment are based on data prepared by the Cooper Institute from a longitudinal study related to physical fitness levels. The Trial Court utilizes the **40th percentile** as passing criteria for the assessment.

This assessment will be on day one of the academy, or at a time in accordance with the academy schedule as directed by the Academy Director. The purpose of this assessment is to determine that candidates meet an acceptable fitness level to safely and regularly participate in the academy physical training regimen without undue risk of injury or inability to fully participate in the training program.

Recruits that do not meet or exceed the 40th percentile standard shall be dismissed from the Academy without prejudice and will remain eligible for reinstatement to a future academy class to be determined at the discretion of the Director of Security. One such deferred reinstatement is allowed.

The following four components compose the PFA:

1.5 Mile Run

- Purpose: The mile and 1 half run is used to assess and measure aerobic/cardiovascular strength.
- Protocol: Recruits will be required to run, jog, or walk a 1.5 mile course. This distance should be considered to be a run. As the Recruit crosses the 1.5 mile start the time will begin, as the Recruit crosses the finish line time will be recorded. A pass/fail status will be determined based on the requirements in the Recruits' age bracket.

300 Meter Run

- Purpose: The 300m run is a long sprint test, and a test of anaerobic capacity,

which is important for performing short intense bursts of effort.

Protocol: Recruits will be required to run, jog, or walk a 300m course. This distance should be considered a sprint. As the Recruit crosses the 300m start the time will begin, as the Recruit crosses the finish line time will be recorded. A pass/fail status will be determined based on the requirements in the recruits' age bracket.

The Sit-Up Test

Purpose: This test measures the muscular endurance of the abdominal muscles. This is important for performing tasks that involve the use of force. It helps to maintain good posture and minimize lower back problems.

Protocol: The Recruit lies on back with tops of shoulder blades touching the floor; hands behind the head with fingers interlaced. The knees are bent at a 90 degree angle with feet placed flat on the floor. Feet are held in place by downward pressure across the laces. The Recruit raises upper body until the base of the neck is in-line with the spine (back is perpendicular to the floor) or the elbows make contact with the crest of the bent knee; the officer then returns to the starting position. Tops of both shoulder blades must touch the floor. Recruits will have one minute to do as many sit-ups as possible. A break in repetitions will be allowed in the up position; the repetitions at the end of one minute period will be recorded and pass/fail will be determined based on the requirements in the recruits' age bracket.

The Push-Up Test

Purpose: This test measures the muscular endurance of the upper body muscles of the shoulder, chest, and back of the upper arms (extensors). This is important for use of force involving pushing motion.

Protocol: The Recruit begins in the front leaning rest position, one to two hand widths beyond the shoulders and elbows must be away from the body, arms fully extended, body held straight with the feet no more than 3 inches apart and the toes touching the floor. As arms are flexed the body is lowered toward the floor until the upper arms are parallel to the floor (a fist or a sponge may be used to determine accurate range from the chest to the floor). Recruits will have one minute to do as many push-ups as possible. Stopping or a break in repetitions will be allowed in the up position; the repetitions at the end of the one minute period will be recorded and pass/fail will be determined based on the requirements in the

Recruits' age bracket.

Physical Fitness Standards

Based on the Cooper Institute normative data.

Males

40th Percentile the required passing score for the initial assessment.

MALES	20-29	30-39	40-49	50-59	60+
SIT-UPS	38	35	29	24	19
PUSH-UPS	29	24	18	13	10
1.5 MILE RUN	12:29	12:53	13:50	15:14	17:19
300 Meter Run (measured in seconds)	59	58.9	72.0	83.2	N/A

Females

40th Percentile the required passing score for the initial assessment.

FEMALES	20-29	30-39	40-49	50-59	60+
SIT-UPS	32	25	20	14	6
PUSH-UPS	15	11	9	12(m)	8(m)
1.5 MILE RUN	15:05	15:56	17:11	19:10	20:55
300 Meter Run (measured in seconds)	71.0	79.0	94.0	N/A	N/A

Physical Training Focus Areas

Cardiovascular and Respiratory Endurance

This is one of the physical fitness elements you will be training during Academy Training. It takes approximately 6-8 weeks to develop a solid aerobic base. Running will be an everyday occurrence for at least the first 2 weeks ranging in distance from 1.5 to 3 miles. In addition to daily runs, prepare for movement (running and walking) everywhere you go. To and from class, gym, chow hall, hole, etc... Don't set your goals to accomplish just the minimum standards as

you'll be expected you give 100% effort all of the time. Calisthenics consisting of a variety of exercises generally without using equipment or apparatus. They are intended to increase body strength and flexibility with movements such as bending, jumping, swinging, twisting or kicking, using only one's body weight for resistance. When performed vigorously and with variety, Calisthenics can benefit both muscular and cardiovascular fitness, in addition to improving psychomotor skills such as balance, agility and coordination.

Anaerobic Power

Sprinting is one form of high intensity anaerobic exercise. Sprint work can be broken up into repetitions measuring the intensity by time or distance. Depending on your fitness level, you can create a workout of sprints between 20 and 30 seconds long, giving maximum effort during the work period followed by a one to two minute rest between sprints. The number of sprints you can complete in a workout will be determined by your fitness level. As your anaerobic conditioning improves, increase the intensity by increasing the number of sprints or decreasing the rest time between sprints. This type of anaerobic conditioning will help to better serve your aerobic capacity, where training only in the aerobic zone will decrease your anaerobic capacity.

Warmup & Flexibility/Stretching

Dynamic stretching (see appendix F) is ideal as the core of a warm-up routine for several reasons:

1. It activates muscles you will use during your workout. For example, a lunge with a twist is a dynamic stretching exercise that engages your hips, legs, and core muscles. Whether you are doing weighted lunges in the gym, or lunging for a soccer ball, the muscles involved have *already* been engaged during your warm-up.
2. Dynamic stretching improves range of motion. A dynamic warm-up routine can help you feel more limber.
3. Dynamic stretches improve body awareness. Moving as you stretch challenges your balance and coordination; skills that could help your performance.
4. Warming up in motion enhances muscular performance and power. Studies reveal dynamic stretching before a workout can help you lift more weight and increase overall athletic performance compared to no stretching or static stretching.

Flexibility is defined as the range or extent of motion possible within a given joint. Applying the term "flexibility" to muscles means that if your muscles are very elastic and pliable, stretching easily, then maximum joint flexibility will be available to you. There are three basic types of stretching:

1. **Ballistic stretching** should be avoided. This involves stretching to your limit and performing repetitive bouncing movements, usually quickly. This type of stretching may do more harm than good, increasing the risk of tiny muscle tears, soreness, and injury.

2. **Static stretching** (see appendix G) is gradual stretching through a muscle's full range of motion, until you feel resistance or the beginning of discomfort. You hold the maximum position for 10 to 30 seconds, relax, and then repeat this several times.
3. **Proprioceptive neuromuscular facilitation stretching** is more complicated. One type is called contract/relax stretching. Here you first contract a muscle against resistance; usually provided by another person, and then relax into a static extension of the muscle.

Prior to and after each exercise session as part of the warm up and cool down process, all Recruits will participate in a full body stretching regimen. Stretching before and after physical exercise will help reduce the risk of injuries, enhance athletic performance and increase strength and aerobic power. Before stretching begins, each recruit will perform a short aerobic exercise (e.g., 60 side straddle hops). This will allow freshly oxygenated blood to engorge the muscle, thus increasing individual performance. Proper stretching will increase flexibility. Increased flexibility will aid in the reduction of athletic injuries.

Some basic rules to follow for proper stretching are:

- Always warm-up, Dynamic, by going light aerobic movements for 5 - 8 minutes before engaging in a stretching routine
- Stretch before and after your actual workout
- Hold each stretch for 30 - 40 seconds
- Stretch for 10 - 15 minutes
- Stretch to the point of mild resistance
- Relax as you hold a stretch
- Do not hold your breath
- Do not lock out joints
- Stretching should be smooth and controlled - no bouncing
- Stop the stretch at the first sign of pain

Participating in a proper stretching routine before and after your workout provides the following fitness advantages:

- Reduces injuries due to the tearing of muscle tissue
- Increases range of motion
- Increases muscular strength
- Promotes muscle relaxation
- Promotes faster recovery from soreness due to strenuous activity
- Promotes better circulation
- Makes strenuous activities like running, cycling, and swimming easier

AEROBIC EXERCISE

Aerobic exercise, also known as cardiorespiratory and cardiovascular exercise, is exercise that requires the use of large amounts of oxygen and use of large muscle groups in a continuous and rhythmic manner for a sustained period of time. Aerobic exercise provides a person with numerous benefits, including but not limited to:

- Decreased blood pressure
- Decreased body fat and triglyceride levels
- Decreased risk of developing cardiovascular disease
- Increased bone density

Before engaging in any cardiovascular exercise, you should understand the four basic components to a cardiovascular program:

1. Mode is the kind or type of activity you decide to participate in. Primary aerobic activities include brisk walking, running, swimming, and cross-country skiing. Secondary aerobic activities may include stair climbing, racquetball, and circuit course-type weight training.
2. Frequency refers to how often you participate in a type of exercise. Under ideal conditions, aerobic exercise two days a week will maintain a person's current fitness level. However, in order to improve your aerobic conditioning level, 3 - 5 days of aerobic exercise is usually needed.
3. Duration refers to the amount of time you continuously perform an exercise. It is important to remember that in order for an exercise to be aerobic, it must involve continuous motion of the large muscles of the body. How long you exercise will depend on your individual physical conditioning goal. Normally 15 - 60 minutes of continuous activity is acceptable. Recent research has also shown the exercise duration could be quantified over a period of one day. Simply stated, aerobic fitness levels can improve with as little as ten minutes of exercise duration, as long as the exercise is of an aerobic mode and performed several times, such as 3 - 4 times a day over a 5-day period.
4. Intensity refers to the difficulty of the exercise. With regards to aerobic conditioning, this does not mean harder, more intense levels are better. Moderate intensity levels are almost always more appropriate and enjoyable than high intensity workouts. Individuals that are just starting a fitness routine suffer from or recovering from an injury or illness, or are significantly overweight should first consult with trained medical and fitness personnel before participating in even a low-intensity aerobic exercise program. To receive the maximum benefits from aerobic exercise, the intensity level should be maintained within your aerobic training zone. A simplified method, but not curate method of this is the Borg Scale: The Borg Scale or rating of perceived exertion scale and the so-called "talk test," where you should be able to comfortably talk or take on a conversation while performing aerobic exercise.

It is always important to gradually increase your duration, intensity, and frequency over a period of time. In addition, the more aerobic training you participate in, the more important it is to cross train or change the mode of the exercise.

Sample Training Guide

1.5 Run Training



This beginner runner program assumes that you can already run at least a mile.

Week 1

Day 1: Run easy 1 mile (1.6 K)
Day 2: Rest
Day 3: Run easy 1 mile (1.6 K)
Day 4: 40-45 min cross-training
Day 5: Rest
Day 6: Run easy 1.5 mile (2.4 K)
Day 7: Rest or 30 min walk

Week 2

Day 1: Run easy 1.5 mile (2.4 K)
Day 2: Rest
Day 3: Run easy 1 mile (1.6 K)
Day 4: 40-45 min cross-training
Day 5: Rest
Day 6: Run easy 1.5 miles (2.4 K)
Day 7: Rest or 30 min walk

Week 3

Day 1: Run easy 2 miles (3.2 K)
Day 2: Rest
Day 3: Run easy 1.5 mile (2.4 K)
Day 4: 40-45 min cross-training
Day 5: Rest
Day 6: Run easy 2 miles (3.2 K)
Day 7: Rest or 30 min walk

Week 4

Day 1: Run easy 2 miles (3.2 K)
Day 2: Rest
Day 3: Run easy 1.5 mile (2.4 K)
Day 4: 40-45 min cross-training
Day 5: Rest
Day 6: Run easy 2.5 miles (4 K)
Day 7: Rest or 30 min walk

Week 5

Day 1: Run easy 3 miles (5 K)
Day 2: Rest
Day 3: Run easy 2 miles (3.2 K)

Day 4: 40-45 min cross-training
 Day 5: Rest
 Day 6: Run easy 3 miles (5 K)
 Day 7: Rest or 30 min walk

Week 6

Day 1: Run easy 3.5 miles (5.6 K)
 Day 2: Rest
 Day 3: Run easy 3 miles (5 K)
 Day 4: 40-45 min cross-training
 Day 5: Rest
 Day 6: Run easy 3.5 miles (5.6 K)
 Day 7: Rest or 30 min walk

Week 7

Day 1: Run easy 4 miles (6.4 K)
 Day 2: Rest
 Day 3: Run easy 3 miles (5 K)
 Day 4: 40-45 min cross-training
 Day 5: Rest
 Day 6: Run easy 4.5 miles (7.2 K)
 Day 7: Rest or 30 min walk

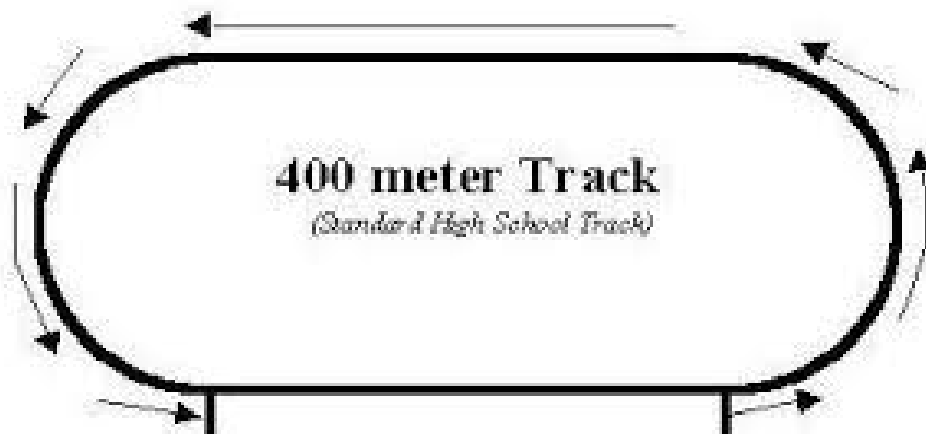
Week 8

Your first 8K (5-miler) is this week! Try to take it a little easier this week, so that you're well-rested for your race. Good luck!

Day 1: Run 40 min
 Day 2: 30 min cross-training
 Day 3: Run 30 min

300 Meter Run Training

- On a standard quarter mile track begin by running a 10 minute warm-up.
- Prepare the body by performing some dynamic stretches.
- Run distances longer than 300m then walk the same distance and repeat 8 times.
- Run distances less than 300m at a faster pace then walk the same distance and repeat 8 times.
- As you feel comfortable, increase your training speed and decrease your short intervals.
- This work out should be done on average 3 times per week.



Push-

Finish

Start

up Training

Week 1 3 sets / 10 reps	Week 2 3 sets / 15 reps
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Week 3 3 sets / 20 reps	Week 4 3 sets / 25 reps
Week 5 3 sets / 30 reps	Week 6 1 set to fatigue <i>or</i> 1 minute
Do each workout every other day.	

Tips

- You may rest in the up position during test preparation training.
- Proper form and positioning will contribute to better performance and ensure safety of the exercise.

Sit-up Training

Week 1 3 sets / 15 reps	Week 2 3 sets / 20 reps
Week 3 3 sets / 25 reps	Week 4 3 sets / 30 reps
Week 5 3 sets / 35 reps	Week 6 1 set to fatigue <i>or</i> 1 minute
Do each workout every other day.	

Tips

- Inhale at the beginning of the sit-up and exhale as you finish the movement.
- Proper form and positioning will contribute to better performance and ensure safety of the exercise.

Injury Prevention

Overtraining

Overtraining involves placing an excessive amount of stress on the body to a point where the body can no longer adapt and adjust, ultimately leading to a breakdown of the body. One of the most common causes of overtraining is doing too much too soon. It is important to remember that an increase in physical fitness comes from dedication over a long period of time. Training more than is necessary or desirable; engaging in exercise to an excessive degree, or engaging in an intensity level over your ability is neither wise, nor beneficial.

Some signs of overtraining are:

- Loss of appetite
- Sudden dramatic loss in weight
- Cold or flu-like symptoms
- Difficulty sleeping
- Changes in mood, depression, or irritability
- Constant sore, aching, or injured joints and muscles

It is best to design a training program that allows the body to recover. A few tips to follow that will help you prevent overtraining problems are:

- Never have two hard days in a row.
- Do not increase your intensity level by more than 10% a week
- Allow your body the time to adapt to your training routine
- Rest and maintain a regular sleep schedule

Overuse Injuries

Overuse/inflammatory conditions may develop slowly and become chronic or may come and go before settling in. Signs and symptoms of overuse injury may include one or several of the following:

Aching	Tingling
Pain	Cracking
Diminished Coordination	Tenderness
Decreased Joint Movement	Swelling
Decreased Strength	Numbness

It is important to be aware of your body and what it is telling you. Continuing a training program while injured will not speed up or increase your fitness results and could possibly lead to a long-term disability.

Preventing Overuse Injuries

The Six “S” Approach to analyzing the cause of overuse injuries from running are:

Shoes: Footwear is a runner’s most important piece of equipment. Footwear is designed to protect the bottom of the foot and provide flexibility and/or stability to the foot. Shock absorption and energy return are both key functions of footwear.

Surface: Choose blacktop roads, without defects, whenever possible. If you run on a track, be sure to change direction approximately every four laps. Run on even soft surfaces whenever possible to enhance shock absorption and to avoid injury.

Speed: Too many people try doing too much, too soon. Avoid increasing running mileage more than 10% a week. Use progression with speed and distance of training.

Structure: Your predisposed body composition. Address limitations and accommodate for leg length discrepancy, flat feet, bunions, etc.

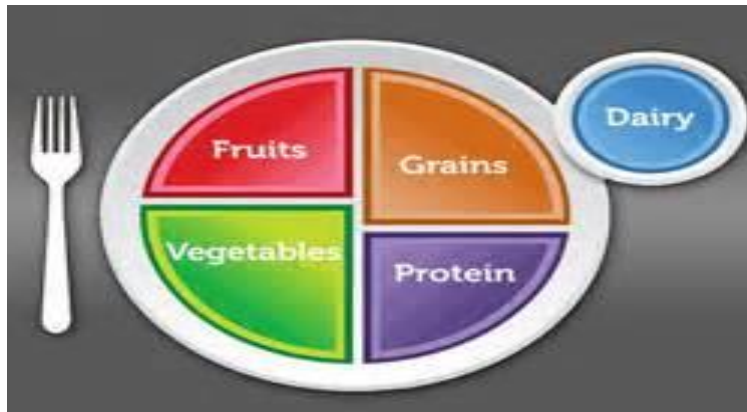
Strength: Muscle balance over muscle imbalance. Stronger muscles provide more power for running up inclines. Equally important, they offer better shock absorption, hence, injury protection when running downhill.

Stretch: Increased flexibility. If stretching is done properly, it prepares the muscle for imposed demands and reduces injury.

Reducing Pain and Injury:

Immediate care of overuse injuries is kept simple by using the R.I.C.E. principle. R.I.C.E. is an acronym for **Rest, Ice, Compression, and Elevation. These techniques reduce further trauma to the injured area, decrease blood flow, and keeps swelling of the affected area to a minimum.**

**NSAIDs (non-steroidal anti-inflammatory drugs), such as Advil, Motrin, or Acetaminophen may also aid in reducing signs and symptoms.*



**It is recommended that you obtain the advice of a physician before taking any type of medication. Vitamins, pain relievers, over the counter medications, etc. are prohibited from at the Academy unless prescribed by a licensed practitioner (Physician, Nurse Practitioner, or a Physician's Assistant).*

Please remember: This information is not intended as a substitute for medical treatment. Consult a physician or healthcare professional if the injury does not resolve.

Nutrition

Healthy Diet

The average diet can range from 1,200 – 3,200 calories per day depending on these factors, but not limited to: Age, Sex, Weight, Fitness level, and Medical Conditions. You may adjust your diet to meet your caloric needs by increasing or decreasing portion sizes, as well as adding or eliminating snacks. Remember to pay attention to fat, cholesterol and sodium content when making substitutions. It is recommended that you consult a professional when making dietary changes (www.ChooseMyPlate.Gov).

Hydration and Fluid Replacement

Water is your most important nutrient. Although it contains no calories, water is essential for life. Water makes up 60% of your total body weight and 70% of your muscles. It serves as a transport mechanism for nutrients, gases, and waste products. It is also involved in the heat regulating functions of the body. Without water, your body cannot work at top levels and you may harm yourself. If you are not properly hydrated during a workout, you may encounter cramping and dehydration. Proper hydration is essential for top performance.

Thirst is an unreliable indicator to hydrate. If you feel thirsty, your body has already approached a level of dehydration. The feeling of thirst should be considered a warning indicating increased body heat and approaching heat illness. At the point of feeling thirsty, you should stop any physical activity and immediately

replace body fluids, preferably with cool clear water. Avoid beverages containing caffeine and alcohol, because they increase urine production and add to dehydration.

Supplements

The consumption of performance-enhancing supplements, protein powders, amino acids, plant extracts, herbal supplements, and other non-food substances is perhaps the trendiest area of sports nutrition. Athletes and laypersons believe that these supplements will give them a competitive edge when, in fact, they may be harmful to both health and performance.

The types of supplements used by athletes are continuously changing. There is a wide-range of substances used. Substances are often marketed without any supportive scientific data to indicate the potential benefits or possible harmful side effects. Food and performance supplements are NOT regulated by the Federal Food and Drug Administration as many people believe. In fact, there is no independent or federally sanctioned agency that regulates the purity and safety of food supplements. Therefore, the use of any performance enhancing supplements is not recommended, endorsed, or encouraged and is prohibited at the Academy unless prescribed by a licensed medical practitioner (Physician, Nurse Practitioner, or a Physician's Assistant).

Drug Use

The use of anabolic steroids and other performance-enhancing drugs, such as testosterone, growth hormone, insulin, and erythropoietin are not only very dangerous, but illegal. Any positive performance results from taking these drugs are usually short lived and are more than often accompanied by serious side effects and can even have fatal results. Do not take any drug, in any form, which is not recommended or prescribed by a licensed medical practitioner.

Closing

Understanding the personal benefits and barriers of exercise and developing skills and resources for regular physical activity are important in maintaining a planned approach to exercise. What motivates one person to become and remain physically active will differ from another. The better that you prepare yourself before you enter the Academy the more enjoyable the experience will be and you will have a greater chance to successfully complete the recruit training program.



THE COMMONWEALTH OF MASSACHUSETTS
TRIAL COURT
OFFICE OF COURT MANAGEMENT
Suffolk County Courthouse
Security Department, 15th Floor Three Pemberton
Square Boston, MA 02108

Jonathan S. Williams
Court Administrator

Jeffrey Morrow
Director of Security

**MEDICAL CLEARANCE TO PARTICIPATE IN
PRE-EMPLOYMENT PHYSICAL ABILITIES TEST FORM**

Name of Applicant: _____

"I hereby certify that I have examined the Applicant and/or reviewed the Applicant's medical history/record to determine that the above-named Applicant is physically capable to safely participate in the Trial Court's Pre-Employment Physical Abilities Test ("PAT") (described in detail on the reverse side). I understand that the PAT consists of a battery of job-related field tests, and that it is intended to be completed in the fastest time possible, requiring maximum effort by the Applicant. The primary goal of this testing is to determine whether the Applicant is capable of performing the minimum physical abilities appropriate to the position of a Court Officer.

After having examined the Applicant and/or reviewed the Applicant's medical history/record, and having considered the activities and components of the test, as well as the health and medical criteria the applicant must meet to take it beginning on page 2 of this form, I recommend that based upon my evaluation and as indicated with my initials:

_____ **The Applicant is fit to perform the physical tasks associated with this test.**

_____ **The Applicant is NOT cleared to participate in the PAT at the present time.**

Physician's Name _____ State _____ Lic # _____
(Please Print)

Physician's Signature _____

Circle medical provider type: Physician - Nurse Practitioner - Physician's Assistant

Date (must be signed within 30 days of PAT): _____

MA Trial Court Use Only

Form Received on: _____

Received by: _____

MTC COURT OFFICER PHYSICAL ABILITIES TEST

Information for Applicants and Health Care Providers

The Physical Abilities Test (“PAT”) is a timed event, designed to measure the applicant’s ability to perform the functions of a Court Officer. It is a strenuous physical activity requiring maximum physical effort.

I. Health and Wellness Parameters for Participation

- 1) Completion of a medical evaluation and medical clearance to participate form by a licensed health care provider within 30-days of the PAT indicating the applicant has no known health and medical conditions that would be contrary to or preclude the safe execution of the test by the applicant. This assessment must include the ability of the applicant to adhere to the criteria listed in paragraph I (2) in no more than 5 minutes and 31 seconds.
- 2) A day of event health screening will be completed on the applicant by a certified EMT prior to initiation of the PAT. All candidates must meet the following criteria for participation in the test:
 1. A blood pressure above 90/60 and below 140/90
 2. A heart rate above 50bpm and below 100bpm
 3. Body temperature must be within normal range (97.7-99.5F)
 4. The applicant must be free of physical or medical conditions that could be negatively influenced by strenuous physical activity.

II. The PAT includes the following seven tests:

- **WEIGHT LIFT**
 - The applicant will be required to pick up a medium-sized bag (approx. 26” x 18’ x 10”) from the ground and place the bag on a waist-high table, and then place the bag back on the floor.
- **WEIGHT CARRY**
 - The applicant will be required to carry a 30lb. canvas bag of lead shot across the gym 3 times (approx.. 150 ft.).
- **STRAIGHT LINE RUN**
 - The applicant will be required to run 100M around the perimeter of a basketball court (perimeter = 86M). Approximately 1.16 laps/330 ft.

- **STAIR CLIMB**

- The applicant will be required to climb up and down a 5-step staircase fourteen(14) times (to simulate 14 total flights).

- **OBSTACLE RUN**

- The applicants will be required to run 100M (approx. 330 ft.). He/she will loop around a total of seven (7) cones and complete this process once. No single straightaway will be longer than 14M.

- **DUMMY DRAG**

- The applicant will be required to drag a 165 lb. dummy 25 ft. to a turnaround point and back 25 ft. The total drag will be 50 ft.
- The dummy will be face-down on the ground, feet facing center court. The applicant must flip the dummy and turn the dummy so its head is facing the center.

- **DEXTERITY**

- The candidate must stand with feet stationary and laterally hook the weighted (37 lbs. off force) handcuff extension to the center pole in a controlled manner and then lower the handcuff bar back to start without dropping the weight.
- The applicant must then complete the same movement on the opposite side.

**WAIVER & RELEASE OF LIABILITY
PHYSICAL ABILITY TESTING**

I acknowledge that I have willingly chosen to participate in the physical agility test for court officer candidates ("PAT") administered by the Office of Court Management of the Trial Court of the Commonwealth of Massachusetts ("Trial Court").

I have reviewed and fully understand the written description of the PAT provided to me by the Trial Court, and I knowingly and voluntarily accept the risks associated with the PAT.

I further state and represent that I am physically able to safely participate in and complete the PAT as described in the written materials.

I, on behalf of myself, my heirs, assigns, executors, administrators and personal representatives, hereby waive and release the Commonwealth of Massachusetts, the Trial Court, its judges, elected and appointed officials, officers, employees, agents and independent contractors from any liability for any and all claims for any injury, damage or loss, including, but not limited to death, which I may sustain or incur to my person or property as the result of being present during or participating in the PAT.

I understand that I have the opportunity, if I so desire, to review this Waiver and Release with an attorney before I sign it. I certify that I have read the foregoing Waiver and Release, that I understand its provisions, and that I am signing it voluntarily.

Name (print)

Candidate/Employee #

Signature

Date

Witness

Date

(This form is NOT required to be notarized but must be witnessed by a person 18 years of age or older)

Appendix C: Physical Abilities Test Attestation



Jeffrey P. Morrow
DIRECTOR OF SECURITY

**THE COMMONWEALTH OF
MASSACHUSETTS THE TRIAL COURT
OFFICE OF COURT MANAGEMENT
Suffolk County Courthouse
Security Department, 15th
Floor Three Pemberton
Square Boston, MA 02108**

PHYSICAL ABILITIES TEST ATTESTATION

I, _____, acknowledge that I have volunteered to participate in the Massachusetts Trial Court Security Department's physical abilities test intended for Court Officer Candidates and Incumbent Court Officers.

I attest to the best of my knowledge, that I am able and capable of safely participating in the physical abilities test. I acknowledge that I must disclose prior to the physical abilities test, any physical conditions or injuries that may have an effect on my participation in the physical abilities test. If applicable, please list any such condition in the space provided below. You may use back of this form to continue explanation if necessary.

Name (print)

Employee #

Signature

Date

Witness

Date

Appendix D: Physical Activity Readiness Questionnaire (Par-Q)

Physical Activity Readiness Questionnaire

Questions: (if you are unsure see a member of the MTC medical staff)

1. **Has your doctor ever said that you have a heart condition and that you should only perform physical activity recommended by a doctor?** ☐ Yes ☐ No
2. **Do you feel pain in your chest when you perform physical activity?** ☐ Yes ☐ No
3. **Have you had any head trauma / concussion in the past 5 years?** ☐ Yes ☐ No
4. **Do you lose your balance because of dizziness or do you / have you ever lose/lost consciousness?** ☐ Yes ☐ No
5. **Has there been any changes in your medical status since your department physical, PAT, or entrance medical clearance examination? These changes would include injuries, illnesses, cardiovascular disease, respiratory infections or diagnosis of a severe or chronic medical condition.** ☐ Yes ☐ No
6. **Are you currently on medication for high blood pressure?** ☐ Yes ☐ No

 If yes, please indicate if your doctor has stated that your blood pressure is now under control. ☐ Yes ☐ No
7. **Do you know any reason why you should not perform recruit physical activity?** ☐ Yes ☐ No
8. **Any YES answers please explain below:**

Signature: _____ **Date:** _____

Appendix E: Non-participant/Modified PT Record

**Massachusetts Trial Court Security Department
Standards & Training Division
Non-Participant / Modified PT Record**

Recruit: _____ **MTCOC #:** _____ **Squad:** _____

Date: _____ **PT Activity:** _____

Reason for Non-Participant Duty Status: _____

Academy Instructor: _____ **Recruit:** _____

Date: _____ **PT Activity:** _____

Reason for Non-Participant Duty Status: _____

Academy Instructor: _____ **Recruit:** _____

Date: _____ **PT Activity:** _____

Reason for Non-Participant Duty Status: _____

Academy Instructor: _____ **Recruit:** _____

Date: _____ **PT Activity:** _____

Reason for Non-Participant Duty Status: _____

Academy Instructor: _____ **Recruit:** _____

Date: _____ **PT Activity:** _____

Reason for Non-Participant Duty Status: _____

Academy Instructor: _____ **Recruit:** _____

Appendix F: Dynamic Stretching

Dynamic Warm-up

Side Straddle Hops (Jumping Jacks)

- The purpose of this exercise is to increase blood circulation and oxygenate blood and muscles
- Stand at the position of attention
- Jump slightly into the air while moving the legs more than shoulder-width apart, swinging the arms sideward and upward to an overhead position, and clapping the hands
- Jump slightly into the air while swinging the arms sideward and downward and resume the start position
- Repeat steps

Frankenstein Kicks (Russian Kicks)

- Purpose is to stretch the hamstring, calves, and lower back.
- Stand at the position of attention
- Keeping your leg straight, kick one leg directly out in front of you as high as you can while simultaneously extending the opposite-side arm to touch it.
- Lower your leg to the starting position.
- Repeat alternating sides.

Squat Bender

- The purpose of this exercise is to develop strength, endurance, and flexibility of the lower back and lower extremities
- Stand with the feet shoulder-width apart, hands on hips with the thumbs in the small of the back.
- Bending the knees, lower yourself to a half-squat position. Thrust the arms forward to shoulder.
- Recover to the start position
- Keeping the knees slightly bent, bend forward at the waist, touching the ground in front of the toes
- Repeat steps

Pushup

- The purpose of this exercise is stretch and build the muscular endurance of the upper body muscles (anterior deltoid, pectoralis major, and triceps).
- Start lying on the floor face down holding your torso up at arm's length
- Lower yourself downward until your chest almost touches the floor.

- Press your upper body back up to the starting position

Rower

- The purpose of this exercise is to improve the ability to move in and out of the supine position to a seated posture
- Lie on back with arms extended overhead, palms facing inward, legs straight and feet touching
- In one motion, bring feet toward body while sitting up and swinging arms forward extending arms next to knees parallel to ground with hands slightly past feet
- Return to starting position, repeat steps

Mountain Climber

- The purpose of this exercise is stretch and warm up the deltoids, biceps, triceps, chest, obliques, abdominals, quads, hamstrings and hip abductors.
- Start in a pushup position with arms and legs long.
- Pull your right knee into your chest.
- Repeat alternating legs

Windmill

- The purpose of this exercise is to develop the ability to safely bend and rotate the trunk. It conditions the muscles of the trunk, legs, and shoulders
- Start with your feet slightly more than shoulder width apart
- Bend the hips and knees while rotating to the left. Reach down and touch the outside of the left foot with the right hand and look toward the rear.
- Return to the starting position.
- Repeat

Appendix G: Static Stretching

Static Stretching

Chest Stretch



- Stand tall, feet slightly wider than shoulder-width apart, knees slightly bent.
- Hold your arms out to the side parallel with the ground and the palms of the hand facing forward.
- Stretch the arms back as far as possible.
- You should feel the stretch across your chest.

Biceps Stretch



- Stand tall, feet slightly wider than shoulder-width apart, knees slightly bent.
- Hold your arms out to the side parallel with the ground and the palms of the hand facing forward.
- Rotate the hands so the palms face to the rear.
- Stretch the arms back as far as possible.
- You should feel the stretch across your chest and in the biceps.

Upper Back Stretch



- Stand tall, feet slightly wider than shoulder-width apart, knees slightly bent.
- Interlock your fingers and push your hands as far away from your chest as possible, allowing your upper back to relax.
- You should feel the stretch between your shoulder blades.

Shoulder Stretch



- Stand tall, feet slightly wider than shoulder-width apart, knees slightly bent.
- Place your right arm, parallel with the ground across the front of your chest.
- Bend the left arm up and use the left forearm to ease the right arm closer to your chest.
- You will feel the stretch in the shoulder.
- Repeat with the other arm.

Shoulder and Triceps Stretch



- Stand tall, feet slightly wider than shoulder-width apart, knees slightly bent.
- Place both hands above your head and then slide both of your hands down the middle of your spine.
- You will feel the stretch in the shoulders and the triceps.

Hamstring Stretch



- Sit on the ground with both legs straight out in front of you.
- Bend the left leg and place the sole of the left foot alongside the knee of the right leg.
- Allow the left leg to lie relaxed on the ground.
- Bend forward keeping the back straight.
- You will feel the stretch in the hamstring of the right leg.
- Repeat with the other leg.

Calf Stretch



- Stand tall with one leg in front of the other, hands flat and at shoulder height against a wall.
- Ease your back leg further away from the wall, keeping it straight and press the heel firmly into the floor.
- Keep your hips facing the wall and the rear leg and spine in a straight line.
- You will feel the stretch in the calf of the rear leg.
- Repeat with the other leg.

Abductor Stretch



- Stand tall with your feet approximately two shoulder widths apart.
- Bend the right leg and lower the body.
- Keep your back straight and use the arms to balance.
- You will feel the stretch in the left leg adductor.
- Repeat with the right leg.

Groin Stretch



- Sit with tall posture.
- Ease both of your feet up towards your body and place the soles of your feet together, allowing your knees to come up and out to the side.
- Rest your hands on your lower legs or ankles and ease both knees towards the ground.
- You will feel the stretch along the inside of your thighs and groin.

Iliotibial (IT) Band Stretch



- Sit tall with legs stretched out in front of you.
- Bend the right knee and place the right foot on the ground to the left side of the left knee.
- Turn your shoulders so that you are facing to the right.
- Use your left arm against your right knee to help you stretch further.
- Use your right arm on the floor for support.
- You will feel the stretch along the length of the spine and in the muscles around the right hip.

Quadriceps Stretch



- Lie face down on the floor, resting your forehead on your right hand.
- Press your hips firmly into the floor and bring your left foot up towards your buttocks.
- Take hold of the left foot with the left hand and ease the foot closer to you. buttocks
- Repeat with the right leg.
- You will feel the stretch along the front of the thigh.

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